

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-23. (Canceled).

24. (Previously presented) An optical fiber link comprising a plurality of optical fiber spans joined one to the other, said plurality of optical fiber spans comprising at least one first unidirectionally-spun optical fiber span and at least one second unidirectionally-spun optical fiber span having mutually opposite spinning directions, wherein the at least one first unidirectionally-spun optical fiber span is obtained from at least one first unidirectionally-spun optical fiber, the at least second unidirectionally-spun optical fiber span is obtained from at least one second unidirectionally-spun optical fiber, the first and second unidirectionally-spun optical fibers being distinct optical fibers and having mutually opposite helicity.

25. (Previously presented) The optical fiber link according to claim 24, wherein the first unidirectionally-spun optical fiber span and the second unidirectionally-spun optical fiber span are joined to each other.

26. (Previously presented) The optical fiber link according to claim 24, wherein said plurality of optical fiber spans comprises a plurality of first optical fiber spans, and a plurality of second optical fiber spans, the first optical fiber spans and the second optical fiber spans being spans of unidirectionally spun optical fibers having mutually opposite spinning directions, and wherein the first optical fiber spans and the second optical fiber spans are alternated with each other in the optical fiber link.

27. (Previously presented) The optical fiber link according to claim 24, wherein the first unidirectionally-spun optical fiber span and the second unidirectionally-spun optical fiber span have substantially a same span length.

28. (Previously presented) The optical fiber link according to claim 24, wherein each of said first and second unidirectionally-spun optical fiber spans have a span length, a spinning period p , a correlation length L_F and a beat length L_B , and said span length is lower than 10 times the transient characteristic length L_T defined as

$$L_T = L_F \left(1 + \frac{4L_B^2}{p^2} \right).$$

29. (Previously presented) The optical fiber link according to claim 27, wherein said span length is equal to or lower than approximately 3 Km.

30. (Previously presented) The optical fiber link according to claim 29, wherein said span length is equal to or lower than approximately 1 Km.

31. (Previously presented) The optical fiber link according to claim 28, wherein said span length is equal to or lower than approximately 3 Km.

32. (Previously presented) The optical fiber link according to claim 24, wherein the first unidirectionally-spun optical fiber span and the second unidirectionally-spun optical fiber span have substantially a same spin rate.

33. (Previously presented) The optical fiber link according to claim 26, wherein the number of first optical fiber spans and second optical fiber spans is odd.

34. (Previously presented) An optical cable line comprising a plurality of optical cable trunks joined to each other, wherein said plurality of optical cable trunks comprises at least a first optical cable trunk and a second optical cable trunk, the first

optical cable trunk comprising a first optical fiber span unidirectionally-spun in a first direction and obtained from a first unidirectionally-spun optical fiber, and the second optical cable trunk comprising a second optical fiber span unidirectionally-spun in a second direction opposite to the first direction and obtained from a second unidirectionally-spun optical fiber, the first and the second optical fiber spans being optically linked to each other.

35. (Previously presented) The optical cable line according to claim 34, wherein the first and the second optical fiber spans are joined to each other.

36. (Previously presented) The optical cable line according to claim 34, wherein the first and the second optical fiber spans have substantially a same span length.

37. (Previously presented) The optical cable line according to claim 34, wherein each of said first and second optical fiber spans have a span length, a spinning period p , a correlation length L_F and a beat length L_B , and said span length is lower than 10 times the transient characteristic length L_T defined as

$$L_T = L_F \left(1 + \frac{4L_B^2}{p^2} \right).$$

38. (Previously presented) The optical fiber link according to claim 36, wherein said span length is equal to or lower than approximately 3 Km.

39. (Previously presented) The optical fiber link according to claim 38, wherein said span length is equal to or lower than approximately 1 Km.

40. (Previously presented) The optical fiber link according to claim 37, wherein said span length is equal to or lower than approximately 3 Km.

41. (Previously presented) The optical cable line according to claim 34, wherein the first and the second optical fiber spans have substantially a same spin rate.

42. (Previously presented) The optical cable line according to claim 34, wherein the plurality of optical cable trunks comprise a plurality of first optical fiber spans and a plurality of second optical fiber spans joined to each other to form one optical fiber link, the first optical fiber spans and the second optical fiber spans being unidirectionally-spun optical fibers having mutually opposite spin directions, and wherein the first optical fiber spans and the second optical fiber spans are alternated with each other in the optical fiber link.

43. (Previously presented) The optical cable line according to claim 34, wherein at least one optical cable trunk of said plurality of optical cable trunks has an optical core comprising a plurality of unidirectionally-spun optical fiber spans having a same spin direction.

44. (Previously presented) The optical cable line according to claim 34, wherein at least one optical cable trunk of said plurality of optical cable trunks has an optical core comprising at least two unidirectionally-spun optical fiber spans having opposite spin directions.

45. (Previously presented) The optical cable line according to claim 34, wherein the total number of optical cable trunks is odd.

46. (Currently amended) A method of realizing an optical fiber link comprising: providing at least a first span of optical fiber obtained from at least one first unidirectionally-spun optical fiber unidirectionally-spun in a first direction;

providing at least a second span of optical fiber obtained from at least one second unidirectionally-spun optical fiber unidirectionally-spun in a second direction opposite to the first direction; and

joining the first span and the second span together at a respective end thereof, such that the first and the second span of optical fiber exhibit mutually opposite helicity.

47. (Currently amended) A method of producing an optical cable, comprising providing a plurality of optical fibers to a cable manufacturing line, wherein said plurality of optical fibers comprises at least a first optical fiber obtained from a first unidirectionally-spun optical fiber being unidirectionally-spun in a first direction, and at least a second optical fiber obtained from a second unidirectionally-spun optical fiber being unidirectionally-spun in a second direction opposite to the first direction, the first and the second optical fibers exhibit a mutually opposite helicity.

48. (Previously presented) A method of realizing an optical cable line, comprising:

forming a plurality of optical cable trunks, each one comprising at least one optical fiber span; and

joining the optical cable trunks one to another;

the step of forming a plurality of optical cable trunks comprising forming at least one first trunk comprising a first optical fiber span obtained from a first unidirectionally-spun optical fiber unidirectionally-spun in a first direction, and forming at least one second trunk comprising a second optical fiber span obtained from a second unidirectionally-spun optical fiber unidirectionally-spun in a second direction opposite to

the first direction, and the step of joining the optical cable trunks one to another comprises optically linking the first optical fiber span to said second optical fiber span.